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M.H.

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/690,474      | 10/18/2000  | Masahiko Miyamoto    | 07409.0020          | 3518             |

22852 7590 05/09/2003

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EXAMINER

NGUYEN, BINH AN DUC

ART UNIT

PAPER NUMBER

3713

DATE MAILED: 05/09/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

(YK)

|                              |                   |                 |
|------------------------------|-------------------|-----------------|
| <b>Office Action Summary</b> | Application No.   | Applicant(s)    |
|                              | 09/690,474        | MIYAMOTO ET AL. |
|                              | Examiner          | Art Unit        |
|                              | Binh-An D. Nguyen | 3713            |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 18 October 2000.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 6-12 and 14-19 is/are allowed.
- 6) Claim(s) 1-5 and 13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                          | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                 | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the camera and images obtain by the camera for performing measurement thereof (claim 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The disclosure is objected to because of the following informalities:

The terms cited "deg" and "sec" throughout the specification must be changed to "degree" and "second".

On Page 27, line 19, the cited term "the tree dimensional coordinates" should be changed to "the three dimensional coordinates".

Appropriate correction is required.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not teach how to position the camera and utilize it to capture images, and further, collect data from the images for analysis.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1 is rejected under 35 U.S.C. 102(b) or (e) as being anticipated by Blood (4,849,692) or Jones (4,737,794) or Raab (4,314,251).

Blood or Jones or Raab teaches a system and method for measuring the relative position and orientation of two bodies comprising utilizing a three dimensional magnetic sensor (receiver); forming magnetic fields (from magnetic radiation source), each distribution of intensity and direction thereof being known, within a range motion of the sensor, so that the three dimensional magnetic sensor senses magnetism of each of the formed magnetic fields for outputting signals corresponding to three dimensional position of the sensor with respect to a predetermined point, and to pointing direction of

the sensor with respect to a predetermined direction; acquiring at least one of three dimensional position coordinates data of the sensor.

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) or (e) as being anticipated by Johnson's 5,638,300 or 5,907,819.

Johnson teaches a swing measurement and analysis for measuring and analyzing a swing behavior of a golf club having an impact implement comprising: fixing a three dimensional magnetic sensor 20 to a grip portion of the impact element; forming magnetic fields (from radiation source 32), each distribution of intensity and direction thereof being known, within a range motion of the grip portion, so that the three dimensional magnetic sensor senses magnetism of each of the formed magnetic fields for outputting signals corresponding to three dimensional position of the grip portion with respect to a predetermined point, and to pointing direction of the grip portion with respect to a predetermined direction; acquiring at least one of three dimensional position coordinates data of the grip portion and pointing direction data of the grip portion from the output signals; the impact implement is a golf club; the three dimensional position coordinates data and the pointing direction data, are acquired during the swing of the golf club and represent the swing behavior of the grip position from the top state to the impact state of the swing; the three dimensional magnetic sensor fixed to the grip portion has three mutually orthogonal axes for sensing; receiving time sequence data of three dimensional position coordinates of the grip

portion of the golf club and time sequence data of pointing direction of the grip portion during a golf swing.

8. Claims 6-12 and 14-19 are allowed.

9. Claim 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh-An D. Nguyen whose telephone number is 703-305-5713. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 703-308-4119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

  
S. THOMAS HUGHES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

BN  
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